

<b>L Number</b>	<b>Hits</b>	<b>Sear h T xt</b>	<b>DB</b>	<b>Tim stamp</b>
<b>1</b>	<b>2</b>	<b>(second adj diffusi n adj barrier) near5 dir tly n ar5 (first adj diffusi n adj barri r)</b>	<b>USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB</b>	<b>2004/06/26 05:58</b>
<b>2</b>	<b>5</b>	<b>(second adj diffusion adj barrier) near5 (top or directly) near5 (first adj diffusion adj barrier)</b>	<b>USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB</b>	<b>2004/06/26 05:59</b>
<b>3</b>	<b>14</b>	<b>((multipld or multi or two) near2 diffusion near2 barrier near2 (layer or film)).clm.</b>	<b>USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB</b>	<b>2004/06/26 05:59</b>
<b>4</b>	<b>19</b>	<b>((multiple or multi or two) near2 diffusion near2 barrier near2 (layer or film)).clm.</b>	<b>USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB</b>	<b>2004/06/26 06:01</b>
<b>5</b>	<b>807</b>	<b>((first or second or upper or lower or top or bottom) near2 diffusion near2 barrier near2 (layer or film)) or ((multiple or multi or two) near2 diffusion near2 barrier near2 (layer or film)).clm.</b>	<b>USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB</b>	<b>2004/06/26 06:01</b>
<b>6</b>	<b>304</b>	<b>((first or second or upper or lower or top or bottom) near2 diffusion near2 barrier near2 (layer or film)) or ((multiple or multi or two) near2 diffusion near2 barrier near2 (layer or film))).clm.</b>	<b>USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB</b>	<b>2004/06/26 06:01</b>
<b>7</b>	<b>74</b>	<b>((first or second or upper or lower or top or bottom) near2 diffusion near2 barrier near2 (layer or film)) or ((multiple or multi or two) near2 diffusion near2 barrier near2 (layer or film))).clm. and ((copper or cu) near (interconnect or interconnection or metallization or metal))</b>	<b>USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB</b>	<b>2004/06/26 06:02</b>
<b>8</b>	<b>33</b>	<b>((first or second or upper or lower or top or bottom) near2 diffusion near2 barrier near2 (layer or film)) or ((multiple or multi or two) near2 diffusion near2 barrier near2 (layer or film))).clm. and ((copper or cu) near (interconnect or interconnection or metallization or metal)) and (via or trench or plug).clm.</b>	<b>USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB</b>	<b>2004/06/26 06:05</b>

9	448	(((first or second or upper or lower or top or bottom) near3 barrier near2 (layer or film)) or ((multiple or multi or two) near2 diffusion near2 barrier near2 (layer or film))).clm. and ((copper or cu) near (interconnect or interconnection or metallization or metal)) and (via or trench or plug).clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/26 06:05
10	427	(((first or second or upper or lower or top or bottom) near3 barrier near (layer or film)) or ((multiple or multi or two) near2 diffusion near2 barrier near2 (layer or film))).clm. and ((copper or cu) near (interconnect or interconnection or metallization or metal)) and (via or trench or plug).clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/26 06:06
11	427	(((first or second or upper or lower or top or bottom) near3 barrier near (layer or film)) or ((multiple or multi or two) near2 diffusion near3 barrier near (layer or film))).clm. and ((copper or cu) near (interconnect or interconnection or metallization or metal)) and (via or trench or plug).clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/26 06:06
12	428	(((first or second or upper or lower or top or bottom) near3 barrier near (layer or film)) or ((multiple or multi or two) near3 barrier near (layer or film))).clm. and ((copper or cu) near (interconnect or interconnection or metallization or metal)) and (via or trench or plug).clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/26 06:06
13	122	(((first or second or upper or lower or top or bottom) near3 barrier near (layer or film)) or ((multiple or multi or two) near3 barrier near (layer or film))).clm. and ((copper or cu) near (interconnect or interconnection or metallization or metal)).clm. and (via or trench or plug).clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/26 06:08
14	37	(((first or second or upper or lower or top or bottom) near3 barrier near (layer or film)) or ((multiple or multi or two) near3 barrier near (layer or film))).clm. and ((copper or cu) near (interconnect or interconnection or metallization or metal)).clm. and (via or trench or plug).clm. and ((first and second) near2 barrier).clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/26 06:09
15	48	(((first or second or upper or lower or top or bottom) near3 barrier near (layer or film)) or ((multiple or multi or two) near3 barrier near (layer or film))).clm. and ((copper or cu) near (interconnect or interconnection or metallization or metal)).clm. and (via or trench or plug).clm. and (first near10 (barrier near2 (layer or film)) near10 second).clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/26 06:11

16	49	(first near barrier) near10 (directly or overlying) near10 (second near barrier)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/26 06:12
17	32	(first near barrier) near5 (directly or overlying) near5 (second near barrier)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/26 06:12
18	16	((first near barrier) near5 (directly or overlying) near5 (second near barrier)).clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/26 06:13
19	1	((first near barrier) near5 (directly or overlying) near5 (second near barrier)).clm. and ((copper or cu) near2 (interconnect or interconnection or metallization or metal)).clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/26 06:14
20	1	((upper or top or first) near barrier) near5 (directly or overlying) near5 (second near barrier)).clm. and ((copper or cu) near2 (interconnect or interconnection or metallization or metal)).clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/26 06:14
21	2	((upper or top or first) near2 barrier) near5 (directly or overlying) near5 (second near barrier)).clm. and ((copper or cu) near2 (interconnect or interconnection or metallization or metal)).clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/26 06:14
22	4	((upper or top or first) near2 barrier) near5 (directly or overlying) near5 ((lower or bottom or second) near2 barrier)).clm. and ((copper or cu) near2 (interconnect or interconnection or metallization or metal)).clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/26 06:15
23	72	((upper or top or first) near2 barrier) near10 ((lower or bottom or second) near2 barrier)).clm. and ((copper or cu) near2 (interconnect or interconnection or metallization or metal)).clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/26 06:21
24	1	09/883370	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/26 06:17
25	4	diffusion near preventive near insulating near layer	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/26 06:21

26	4390	((cu or copper) near (inter connect r interconnection or metallization or metal)).clm.	USPAT; US-P PUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/26 06:22
27	121	((cu r copper) near (interconnect or interconnection or metallization or metal)).clm. and (first near2 (liner or barrier)).clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/26 06:22
28	70	((cu or copper) near (interconnect or interconnection or metallization or metal)).clm. and (first near2 (liner or barrier)).clm. and (second near2 (liner or barrier)).clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/26 06:22
29	97	((cu or copper) near (interconnect or interconnection or metallization or metal)).clm. and (first near3 (liner or barrier)).clm. and (second near3 (liner or barrier)).clm.	USPAT; US-PGPUB; EPO; PO; DERWENT; IBM_TDB	2004/06/26 06:22
30	61	((cu or copper) near (interconnect or interconnection or metallization or metal)).clm. and (first near3 (liner or barrier)).clm. and (second near3 (liner or barrier)).clm. and (via or trench or plug).clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/26 06:23
31	54	((cu or copper) near (interconnect or interconnection or metallization or metal)).clm. and (first near3 (liner or barrier)).clm. and (second near3 (liner or barrier)).clm. and (via or trench or plug).clm. and (insulating or dielectric).clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/26 06:26
32	3106	((interconnect or interconnection or metal or metallization) near (layer or film)) same (barrier near3 (layer or film)) same (trench or via or plug) same (insulating or dielectric)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/26 06:29
33	1961	((interconnect or interconnection or metal or metallization) near (layer or film)) same (barrier near3 (layer or film)) same (trench or via or plug) same (insulating or dielectric) and (copper or cu)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/26 06:29
34	456	((interconnect or interconnection or metal or metallization) near (layer or film)) same (barrier near3 (layer or film)) same (trench or via or plug) same (insulating or dielectric)).ti,ab,clm. and (copper or cu)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/26 06:29
35	362	((inter connect r int r nne ti n r m tal or m tallizati n) near (layer or film)) sam (barrier n ar3 (layer or film)) same (tr nch or via or plug) same (insulating or dielectric)).ti,ab, lm. and (c pp r r u).ti,ab,clm.	USPAT; US-P PUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/26 06:29

36	119	(((int rconne t r interc nnecti n or m tal r metallization) n ar (lay r or film)) same (barrier near3 (lay r r film)) same (tr n h or via or plug) am (insulating or dielectri )),ti,ab,clm. and (c pper r cu).ti,ab,clm. and ((first r s c nd r upp r or lower or top or bottom) near2 (diffusion or barrier)).clm.	USPAT; US-P PUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/26 06:30
37	93	(((interconnect or interconnection or metal or metallization) near (layer or film)) same (barrier near3 (layer or film)) same (trench or via or plug) same (insulating or dielectric)).ti,ab,clm. and (copper or cu).ti,ab,clm. and ((first or second or upper or lower or top or bottom) near2 (diffusion or barrier)).clm. and ((first or second or upper or lower or top or bottom) near2 (insulating or dielectric)).clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/26 06:34
38	261	(diffusion near2 (prevent or preventing or prevention or preventive) near2 (oxide or liner or barrier or insulating or dielectric)).clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/26 06:35
39	53	((first or second or upper or lower or top or bottom) near2 (diffusion near2 (prevent or preventing or prevention or preventive) near2 (oxide or liner or barrier or insulating or dielectric))).clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/26 06:35
40	24	((first or second or upper or lower or top or bottom) near2 (diffusion near2 (prevent or preventing or prevention or preventive) near2 (oxide or liner or barrier or insulating or dielectric))).clm. and (copper or cu).clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/26 06:37
41	11	((first or second or upper or lower or top or bottom) near2 (copper or cu) near2 (diffusion near2 (prevent or preventing or prevention or preventive) near2 (oxide or liner or barrier or insulating or dielectric))).clm. and (copper or cu).clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/26 06:38